Orion Post Landing LiOH and Toxic Sensor Development

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The Orion Crew Exploration Vehicle (CEV) lands in the water with most resources depleted. There is a need to provide CO2 control while the cabin remains sealed for two hours post landing and there is a need to verify the outside air is free of ammonia or propellants, which may be venting from the vehicle, prior to opening the cabin. Development of approaches to perform these tasks while minimizing weight, volume, and cost are being investigated. This paper will document the results of those investigations.

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